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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,224	07/24/2000	Norishige Kakuno	Q60222	5390

7590 02/27/2004
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EXAMINER

PHAM, THIERRY L

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 02/27/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/624,224

Applicant(s)

KAKUNO, NORISHIGE

Examiner

Thierry L Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION***Specification***

The disclosure is objected to because of the following informalities: Title: "storagre" should read as "storage". Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: Printer System flexibly compatible with plurality of Printer Control Languages (PCLs) using Intermediate and Raster codes.

Drawings

Figure 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al (EP 820004).

Regarding claim 1, Suzuki discloses a printer system (host computer and printer, Fig. 1) combining a printer device and at least one data processing device (host computer, Fig. 1), wherein said data processing device comprises: (1) intermediate code generating means (printer driver from the host computer converts PDL to intermediate data or codes, Fig. 1, col. 2, lines 10-27) for generating an intermediate code compatible with the print data by performing a language analysis of the print data (language interpreter, Fig. 4, col. 7, lines 53-67); and (2) intermediate code rasterizing means (conversion means for

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converting intermediate codes to bit image data, col. 2, lines 10-27) for rasterizing said generated intermediate code into print image information, and (3) wherein said printer device (printer, Fig. 1) comprises printing means for controlling (controller, Fig. 1, col. 5, lines 23-33) the print image information rasterized by the intermediate code rasterizing means stored in a prescribed storage area (image buffer, Fig. 1, col. 5, lines 35-47) of said printer device, and printing on the basis of said stored print image information.

Regarding claim 2, Suzuki further discloses a printer system according to Claim 1, wherein said printer device comprises: (1) intermediate code generating means (intermediate code convert part, Fig. 4, col. 7, lines 53-59 to col. 8, lines 1-5) for generating an intermediate code compatible with the print data by performing language analysis of the print data (language interpret part, fig. 4); and (2) intermediate code rasterizing means (conversion means for converting intermediate code to bit image data, col. 2, lines 10-27) for rasterizing said generated intermediate code into print image information, and (3) wherein the intermediate code generating means of said data processing device is capable of analyzing the print data described in an language (apparently, PDL languages are not the same as intermediate code languages, Fig. 1, col. 12, lines 27-49) not corresponding to the intermediate code generating means of said printer device.

Regarding claim 3, Suzuki further discloses a printer system according to Claim 2, wherein said printer device further comprises determination means (language interpret part (Fig. 4) within the controller of Fig. 1, col. 7, lines 53-59 to col. 8, lines 1-10) for determining the type of language of the input print data, selecting an intermediate code generating means (GRM, Fig. 4, col. 8, lines 5-25) on the basis of the determination result, and delivering said print data to said selected intermediate code generating means (intermediate code convert part, Fig. 4, col. 8, lines 5-25).

Regarding claim 4, Suzuki further discloses a printer system according to any one of Claims 1 to 3, wherein said intermediate code generating means generates an

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intermediate code as well as outputs identification information (Intermediate Code includes identification number, col. 4, lines 50-60 to col. 5, lines 1-10) of the intermediate code to said printing means, and wherein said printing means selects (controller of printer, Fig. 1) an intermediate code rasterizing means on the basis of intermediate code identification information input from the intermediate code generating means, and controls print image information rasterized by said selected intermediate code rasterizing means stored in a prescribed storage area of said printer device.

Regarding claim 5, Suzuki further discloses a printer system according to Claim 4, wherein said printing means stores the corresponding relation (identification numbers of characters and bit images appear in the same band, col. 5, lines 1-10) between intermediate code identification information and the intermediate code rasterizing means, and selects an intermediate code rasterizing means with reference to the corresponding relation.

Regarding claim 6, Suzuki further discloses a printer system according to Claim 4, wherein said intermediate code identification information includes address information (band numbers declaration, Fig. 3 (a-e), col. 7, lines 2-30) for calling the corresponding intermediate code rasterizing means.

Regarding claim 7, Suzuki further discloses A printer system according to Claim 4, wherein said intermediate code generating means further outputs information of bandwidth and bandheight (intermediate codes include size specifications, col. 5, lines 1-10) compatible with an intermediate code (or language), and wherein said printing means (printer, fig. 1) restructures (bands arrangement, Fig. 3D, col. 9, lines 20-40) said prescribed storage (image buffer, Fig. 1) area on the basis of information of bandwidth and bandheight input through the intermediate code generating means, and controls said rasterized print image information to be stored in said prescribed storage area restructured in band units (band units, col. 3, lines 7-10).

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Regarding claims 8-16, the limitations recited are similar to those recited in claims 1-7; therefore, claims 8-16 will be rejection for the same rationale/basis as described in claims 1-7 above.

Regarding claim 17, Suzuki further discloses a printing method to be used in a printer system combining a printer device and a data processing device, comprising:

- (1) a determination step (language interpret part (Fig. 4) within the controller of Fig. 1, col. 7, lines 53-59 to col. 8, lines 1-10) for determining the type of language of input print data, selecting an intermediate code generating means (GRM, Fig. 4, col. 8, lines 5-25) on the basis of the determination result, and delivering said print data to said selected intermediate code generating means, in said printer device (intermediate code convert part, Fig. 4, col. 8, lines 5-25); and
- (2) an intermediate code generating step (intermediate code convert part, Fig. 4, col. 7, lines 53-59 to col. 8, lines 1-5) for generating the intermediate code compatible with the print data by performing language analysis (language interpret part, fig. 4) of print data, and outputting the intermediate code identification information, in an intermediate code generating means of said printer device or an intermediate code generating means of said data processing device; and
- (3) a print control step (controller of printer, Fig. 1) for selecting an intermediate code rasterizing means (GRM, Fig. 4, col. 8, lines 5-25) on the basis of intermediate code identification information input from the intermediate code generating means, controlling print image (controller of printer, Fig. 1) information rasterized by said selected intermediate code rasterizing means to be stored in a prescribed storage area of said printer device, and printing (printer, fig. 1) on the basis of said stored print image information, in said printer device.

Regarding claim 18, Suzuki further discloses a printing method according to Claim 17 using the data processing device comprising the intermediate code generating means (intermediate code convert part, Fig. 4, col. 7, lines 53-59 to col. 8, lines 1-5), wherein the intermediate code of said data processing device is capable of analyzing the

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print data described in a language not corresponding (apparently, PDL languages are not the same as intermediate code languages, Fig. 1, col. 12, lines 27-49) to the intermediate code generating means of said printer device.

Regarding claim 19, Suzuki further discloses a printing method according to Claim 17, wherein said print control step selects (controller of printer, Fig. 1) an intermediate code rasterizing means (GRM, Fig. 4, col. 8, lines 5-25) with reference to the corresponding relation between intermediate code identification information and the intermediate code rasterizing means.

Regarding claim 20, Suzuki further discloses a computer readable medium storage medium (memory, fig. 2) storing a program for making a computer executable the printing method according to anyone of claims 17-19.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L Pham whose telephone number is (703) 305-1897. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on (703)308-7452. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Thierry L. Pham



January 28, 2004



DAVID MOORE
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